

# Notice of Allowability

Application No.

10/066,060

Examiner

Phallaka Kik

Applicant(s)

TEIG ET AL.

Art Unit

2825

AM

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to amendmt filed 3/27/06, supplemental amendmt filed 4/5/06 & interview conducted on 4/6/06.

2. ☒ The allowed claim(s) is/are 1-22, wherein claims 13,11,12 have been renumbered as 11-13 respectively.

3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) ☐ All b) ☐ Some\* c) ☐ None of the:

1. ☐ Certified copies of the priority documents have been received.

2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.

3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.

5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.

(a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached

1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.

(b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of

Paper No./Mail Date \_\_\_\_\_.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).

6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

## Attachment(s)

1. ☒ Notice of References Cited (PTO-892)

2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08),  
Paper No./Mail Date \_\_\_\_\_

4. ☐ Examiner's Comment Regarding Requirement for Deposit  
of Biological Material

5. ☐ Notice of Informal Patent Application (PTO-152)

6. ☒ Interview Summary (PTO-413),  
Paper No./Mail Date 20050406.

7. ☒ Examiner's Amendment/Comment

8. ☒ Examiner's Statement of Reasons for Allowance

9. ☒ Other See Continuation Sheet.

Continuation of Attachment(s) 9. Other: 1 drawing sheet containing corrected Figure 53A.

### **DETAILED ACTION**

1. This Office Action responds to Applicant's amendment filed on 3/27/2006, supplemental amendment filed on 4/5/2006, and interview conducted on 4/6/2006. Claims 1-22 are pending, wherein claims 1,6,10-11,13-14,19 have been amended. Claims 1-22 have been examined and are allowed, wherein claims 6,11,13-15,19 are subjected to the following Examiner's Amendment.

#### ***Drawings***

2. The drawings were received on 5/22/2002. These drawings are approved by the Examiner, wherein Figure 53 is subjected to the following Examiner's amendment to correctly label as --Figure 53A--. Since the changes to the drawing is very minor and can be done neatly, the Examiner has made the proper changes to the drawing sheet and uses it as the replacement sheet. Accordingly, Applicant is not required to submit a new drawing sheet.

### **EXAMINER'S AMENDMENT**

3. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Ali Makoui (Reg. No. 45,536) on 4/6/2006.

The application has been amended as follows:

#### **In the specification:**

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"Figure 15 illustrates" (page 7, line 3) has been replaced with --Figures 15A, 15B illustrate--.

"Figure 28 illustrates" (page 8, line 3) has been replaced with --Figures 28A, 28B, 28C illustrate--.

"Figure 29 illustrates" (page 8, line 5) has been replaced with --Figures 29A, 29B--.

"Figure 31 illustrates" (page 8, line 8) has been replaced with --Figures 31A, 31B--.

"Figure 53 presents" (page 9, line 16) has been replaced with --Figures 53A, 53B present--.

"Figure 15 illustrates" (page 26, line 18) has been replaced with --Figures 15A, 15B illustrate--.

"Figure 28 illustrates" (page 41, line 19) has been replaced with --Figures 28A, 28B, 28C illustrate--.

"Figure 28" (page 42, line 1) has been replaced with --Figures 28A, 28B, 28C--.

"Figure 29" (page 42, line 18) has been replaced with --Figures 29A, 29B--

"Figure 29 illustrates" (page 46, line 7) has been replaced with --Figures 29A, 29B illustrate--.

"Figure 29" (page 46, line 10) has been replaced with --Figures 29A, 29B--

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"Figure 31" (page 46, line 20) has been replaced with --Figures 31A, 31B--

"Figure 31 illustrates" (page 48, line 20) has been replaced with --Figures 31A, 31B illustrate--.

"at [www.cs.mcgill.ca/~skang5/cs507/welcom.htm](http://www.cs.mcgill.ca/~skang5/cs507/welcom.htm)" (page 51, line 4-5) has been replaced with --on the internet--.

"Figure 31" (page 71, line 11) has been replaced with --Figures 31A, 31B--

"at [www.cs.mcgill.ca/~skang5/cs507/welcom.htm](http://www.cs.mcgill.ca/~skang5/cs507/welcom.htm)" (page 89, line 3) has been replaced with --on the internet--.

"Figure 53 presents" (page 94, line 13) has been replaced with --Figures 53A, 53B present--.

**In the drawings:**

The drawing has been changed as given the attached drawing sheet containing Figure 53, wherein the label "Figure 53" has been changed to --Figure 53A--.

**In the claims:**

As per **claim 6**, "selecting" (line 1) has been replaced with --specifying--.

As per **claim 11**, all texts, including cut-off texts, in line 3 has been replaced with --a) initially identifying a set of initial routing solutions for each net in the group of--;

"the other" (line 15) has been replaced with --other--.

As per **claim 13**, "selecting" (line 1) has been replaced with --specifying--.

As per **claim 14**, --,-- (coma) has been inserted after "nets" (line 2); all texts, including cut-off texts, in line 3 has been replaced with --said routing solution being one route for each net, the--.

As per **claim 15**, "includes" (line 2) has been replaced with --include--.

As per **claim 19**, "selecting" (line 2) has been replaced with --specifying--.

***Allowable Subject Matter***

4. **Claims 1-22** are allowed.

5. The following is an examiner's statement of reasons for allowance:

As per **claims 1-22**, Applicant's supplemental amendment filed on 4/6/2006 and arguments filed on 3/27/2006 set forth the patentability of Applicant's claimed invention, wherein as pointed out by Applicant, the prior arts made of record failed to teach or suggest the method/computer program embedded on a computer readable medium, for specifying a topological routing solution for a group of nets, where each topological route is a route that represents a set of geometric routes that are morphable into one another, comprising the inventive steps/instructions for initially identifying a set of initial routing solutions and specifying a best topological routing solution, as claimed (see Applicant's amendment filed on 3/27/2006, pages 7-8,10-11; supplemental amendment filed on 3/27/2006, pages 2-6), wherein the Examiner's Amendment as given above remove all of the minor informalities raised by the Examiner. Other prior arts made of record similarly failed to teach or suggest the inventive steps/means as claimed. Accordingly, the claimed invention is novel and unobvious over the prior arts made of record.

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***Conclusion***

6. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Phallaka Kik whose telephone number is 571-272-1895. The examiner can normally be reached on Monday-Thursday, 6:30AM-5PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jack Chiang can be reached on 571-272-7483. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

**Any response to this action should be mailed to:**

Commissioner for Patents

Application/Control Number: 10/066,060

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P. O. Box 1450

Alexandria, VA 22313-1450

**or faxed to:**

571-273-8300

A handwritten signature in black ink, appearing to read 'Phallaka Kik', written in a cursive style.

Phallaka Kik  
U.S. Patent Examiner  
April 6, 2006



# Replacement Sheet

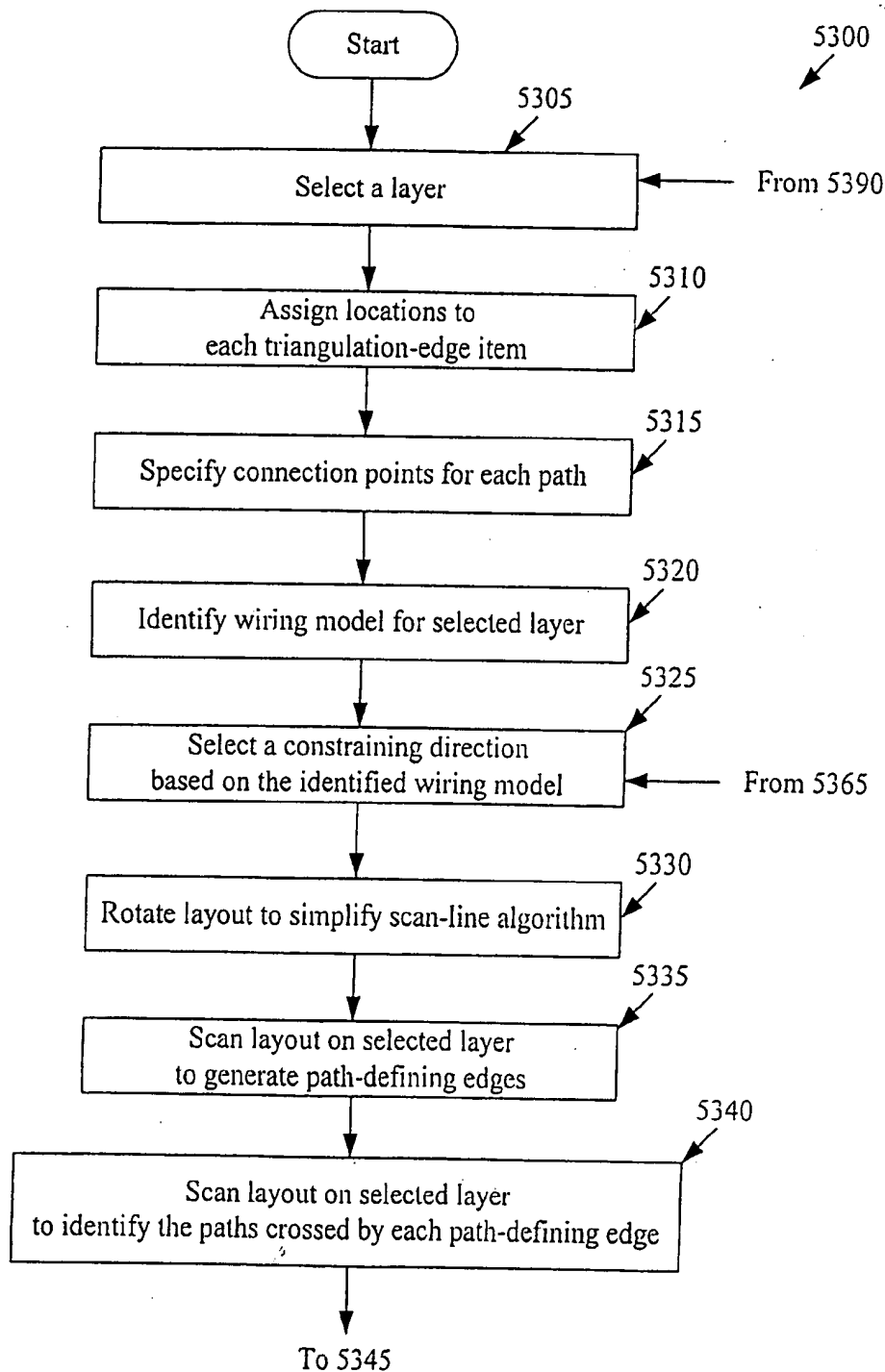


Figure 53A

Figure 53:  $\frac{\text{Figure 53A}}{\text{Figure 53B}}$

Approved  
4/6/06

REPLACEMENT SHEET